

'Psi' Comes to Washington

DIVINING THE SIXTH SENSE

by Edith Kermit Roosevelt

"Our studies can never put us into contact with reality and we can never understand what events are until man becomes endowed with more senses than he presently possesses."

"Physics and Philosophy" by Sir Oliver Lodge

merging developments in bio-information systems are causing governments and financial institutions to explore the potential of an ancient technology known as "divining," the ability to divine or dowse for water, minerals, or other natural elements underground, usually with a hand-held instrument.

On Capitol Hill, for instance, increased research on dowsing is advocated in a Congressional report by Christopher H. Dodge, a specialist in Life Sciences at the Science Policy Division of the Congressional Research Service (CRS) of the Library of Congress. The CRS report, dated June 21, 1983, bears the somewhat unsettling and cumbersome title of "'Psi' Phenomena: Current Status and Trends of Congressional Concern."

It declares:

Dowsing or Divining for Water, Oil and other minerals is an establish practice in this country and abroad, particularly in the Soviet Union. Accordingly, further investigation into the nature and possible mechanisms of this phenomena, which appears to incorporate natural and paranormal aspects, would seem to be warranted.

The CRS document acknowledges that it is essentially a summary of a comprehensive review by Dr. Robert Jahn, Dean of Princeton's School of Engineering/Applied Science entitled "The Persistent Paradox of Psychic Phenomena: An Engineering Perspective." Nor is Jahn's involvement with psychic research an isolated case.

In recent years, specific contributions of physicists and engineers to psychical research has included the development of a variety of electronic random event generators designed to identify human subjects with abilities in PK (the movement of matter or living systems by Psi mechanisms). Magnatometers, torsion pendula, lasers, interferometers, and piezoelectric strain gauges have found similar applications. On a more theoretical level, quantum mechanics, statistical thermodynamics and electromagnet-

ic theory have been applied toward a better understanding of the existence and nature of psi phenomena.

The CRS report observes that some U.S. engineering laboratories "address the field in a substantial and deliberate manner" and predicts that "the future will likely bring greater involvement by the engineering community."

How fast that involvement grows is certainly related to the degree of funding which is available. To date, total U.S. funding for Psi research, which encompasses dowsing, amounts to no more than \$500,000 per year.

By contrast, it is speculated that the Soviet government is firmly committed to the funding of Psi research in the amounts of tens of millions of dollars because of its medical, military, and economic applications. According to CRS, "The Soviets claim that scientific studies of dowsing have yielded significant results. Accordingly, dowsing is taught to professional mineralogists and geologists at Tomsk Polytechnical Institute."

Dowsing With The World Bank

While no such widespread acceptance of dowsing occurs today in Western schools, apparently some people in development circles have an open mind about it. The World Bank, which can hardly be viewed as a "New Age" powerhouse, recently conducted a seminar on "Dowsing: Its Potential for the Development of Water and Other Resources."

Although dowsing is not now used in any projects which have Bank involvement, Steven Serdahely, Senior Sanitary Engineer in World Bank's Transportation and Water Department, does not rule it out. In a report on the dowsing seminar in the WB publication Bank's World of August, 1983, Serdahely is quoted as saying: "The Bank is concerned with assisting borrowers in developing existing water supplies and locating new ones. In our work, we're always looking for the least-cost solution, and it is conceivable that in some cases dowsing could lead to that solution."

The World Bank engineer went on to say that "It could happen in the future with mounting water shortages verging on the critical that an approach such as dowsing might be suggested by the government."

Bank's World also reported that Bank staffers heard Christopher Bird, author of a book on dowsing entitled *The Divining Hand* (published by E.P. Dutton) make a plea for dowsing as an important approach to location problems. Bird, who formerly headed an office on technology transfer with the Soviet bloc for Rand Corporation, referred to numerous instances where trained dowsers had found water in places where conventional hydrologists insisted none was to be found.

Among the cases cited by Bird was that of Dr. Peter Treadwell, senior executive for the multinational pharmaceutical firm Hoffmann-LaRoche, who was sent all over the world by his company to dowse for water for proposed new manufacturing plants. Bird's book contains many other recent examples of successful commercial applications of dowsing.

Dowsing for Oil

One of the most successful oil dowsers in the business is Paul Clement Brown, who has made successful predictions for the Standard Oil Co., Signal, Getty, Rothschild, Mobil Oil, and Petroleum Co. Brown has opted for one of the simplest dowsing devices used in wildcatting circles: a cylinder filled with petroleum hanging on the



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end of a string. He also uses a stopwatch with its face graduated, not in minutes of time but feet of depth.

"I press the button on top of the watch, starting it from zero, and hold my pendulum steady and motionless. The watch reads off ninety feet of depth every minute. At one point, when the watch has recorded a given depth, say 5,000 feet, the pendulum will start swinging in a circle counterclockwise, at which point I will say, 'In.'

"That depth indicates the top surface of a bed of oil-producing sand," Brown goes on to say. "The pendulum will continue to rotate counterclockwise until the watch reads 5,120 feet, whereupon it will stop. At this point I say, 'Out.' I have reached the bottom of the oil production zone and know it is 120 feet thick."

Using the same method, Brown proceeds down into the ground locating any oil zones deeper than the first one encountered. He predicts the amount of oil a well will produce from a given line noting the intensity of the twirling motions on his dowsing device. These he classifies into four types: "not commercially productive," "good," "very good," and "excellent."

According to Brown, many important oil fields have been discovered not by geologically trained technicians but by gifted dowsers. For instance, a dowser was responsible for one of the most extraordinarily productive wells in this country—Lakeview No. 1 in California. And a dowser known as "Ol' Dad Joiner," at the age of 74, discovered a famous well between Longview and Marshall, Texas, after some leading oil men had found only dry holes.

Hunting Enemy Tunnels

But in addition to such professional superdowsers, it also appears that dowsing works for the majority of us when the need arises. The story of how the United States came to use dowsing rods in the Vietnam war is an example. Louis Matecia, a Virginia land surveyor and a member of the U.S. Society of Dowsers, introduced the Marines to dowsing as a method of locating enemy mines and tunnels. Matecia's "divining rod" was two identical wires, 3/16 inch in diameter bent in the shape of an "L" with an overall length of 34 inches. The longer side of the L was 26 inches in length.

The March 13, 1967 issue of the *Observer*, a weekly published for U.S. forces in Vietnam, reported that the Marines operated the divining

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rod by holding one in each hand, level with the ground, pointing in the direction of their movement. As the carriers moved over, under, or along a hidden structure, the wires would swing into alignment with the structure. The newspaper observed: "Introduced to Marines of the 32nd Batallion, 5th Marine Regiment, the divining rods were greeted with skepticism, but did locate a few Viet Cong tunnels."

Indeed, some Pentagon officials were so impressed by the so-called "coat hanger dowsers" that the prestigious military expert for the New York Times, Hansom Baldwin, reported that Matecia's "rudders" were tested and demonstrated at Camps Pendleton and Quantico.

At that time Matecia admitted that he knew of no explanation for how dowsing worked, and for that matter neither did academics or intelligence experts. As a result, the success of dowsing by the U.S. Marines was not officially quantified and official non-acceptance of the technique continues by the Armed Forces. The U.S. Geological Survey, an arm of the U.S. Department of the Interior, has also labeled dowsing a "curious superstition" that is "practically useless." But this may change as electromagnetic theory is applied toward a better understanding of the existence and nature of the phenomena.

Human Magnetic Sensors

Dr. Zeboj V. Harvalik, former director of the basic research group of the U.S. Army Engineering Laboratories at Fort Belvoir, Virginia, has exposed dowsers to electromagnetic fields, placing shielding on areas of their bodies to pinpoint the location of their magnetic sensors. As a result of these experiments, Harvalik concludes that dowsers have magnetic sensors in the area of their adrenal and pineal glands.

In a paper published in *Physiological Chemistry and Physics*, Harvalik said that dowsers' body sensors are stimulated by magnetic field gradient changes of a different pattern (signa-

tures) and these stimuli are transmitted to a processor in the brain.

Elaborating further in an interview, Dr. Harvalik explained that "dowsers are able to sense changes in the earth's magnetic field due to moisture on the ground. The dowsing rod," he said, "amplifies the slight twitching of your muscles that are responding to changes in magnetic field strength."

However, Dr. Eldon A. Byrd, a medical engineer and physical scientist with the Naval Surface Weapons Center, Silver Spring, Md., disagrees with Harvalik on the role of the adrenal glands. Byrd, a senior member of the Institute of Electric and Electronics Engineers, (IEEE), who is investigating the implications of the biological significance of very weak electromagnetic signals, raises the possibility that instead, "dowsing involves the same kind of mechanism as people being influenced by extremely low frequency (ELF) signals."

In conversations with this writer, Byrd suggested that if reports that there is magnetite in people's sinusoid cavities are correct then the substance could register changes in magnetic field gradients which would result in the physical response of dowsing—even though the conscious mind is unaware of the process.

In his paper, "Non-lineal Electromagnetic Interactions with Living Systems" presented Sept. 26, 1982 at the IEEE's "Frontiers in Health Care" conference, Byrd observed that weak electric and magnetic events outside the body can trigger a variety of internal processes such as self-induced bone growth, cell division, nerve conduction, chemical production within cells, and healing.

In this framework, as these scientists explore such interactions, we appear to be moving to a new science in which mind and matter are viewed as interconnected. As early as the 1950s, Nobel Laureate Physicist Dr. Eugene Wigner appears to have anticipated such a development when he said "before we can speak of a universal reality, a much closer integration of physical and mental phenomena will be necessary."

This fusion is coming to pass as engineers explore the powers of dowsing and the normally inaccessible levels of human awareness it can disclose to us. In other words, it appears that these electromagnetic fields may act as the bridge or intermediate link between the mental and the physical.